

Claims:

1. A method for peer-to-peer database synchronization between a first computer and a second computer, the method comprising the steps of:
 - a) extracting changes from a source database of the first computer to generate an extracted database;
 - b) transferring the extracted database from the first computer to the second computer; and
 - c) replicating the source database on a target database of the second computer from the extracted database in order to synchronize the target database with the source database.
2. The method of Claim 1 further comprising the steps of:
 - 1) compressing the extracted database to generate a compressed extracted database subsequent to step (a); and
 - 2) decompressing the compressed extracted database on the second computer to generate a decompressed extracted database subsequent to step (b).
3. The method of Claim 2 further comprising the step of expunging the extracted database from the first computer after the compressed extracted database is generated.
4. The method of Claim 2 further comprising the step of expunging the compressed extracted database from the first computer after the transferring from the first computer to the second computer.
5. The method of Claim 2 further comprising the step of expunging the extracted database on the second computer after the decompressed database has been generated.

6. The method of Claim 2 further comprising the step of expunging the decompressed database on the second computer after it has been replicated on the target database.

7. The method of Claim 2 wherein in step (b) the compressed extracted database is transferred over a peer-to-peer network between the first computer and the second computer.

8. The method of Claim 7 wherein the peer-to-peer network is a wireless network.

9. The method of Claim 7 wherein the peer-to-peer network is a wired network.

10. The method of Claim 2 wherein in step (2) the compressed extracted database is decompressed in a manner complementary to the compression of step (1).

11. The method of Claim 1 further comprising the steps of:

d) extracting changes from the target database of the target computer to generate an extracted target database;

e) transferring the extracted target database from the second computer to the first computer; and

f) replicating the target database on the source database of the first computer from the extracted target database in order to synchronize the source database with the target database.

12. The method of Claim 11 further comprising the steps of:
 - 1) compressing the extracted target database to generate a compressed extracted target database subsequent to step (d); and
 - 2) decompressing the compressed extracted target database on the first computer to generate a decompressed target database subsequent to step (e).

13. A method for synchronizing a database of a first computer with a database of a second computer, the method comprising the steps of extracting changes from the database of the first computer, transferring the changes to the second computer and replicating the changes on the database of the second computer such that the databases on the first computer and the second computer are synchronized.

14. The method of Claim 13 further comprising the step of compressing the changes prior to transferring from the first computer to the second computer.

15. The method of Claim 13 wherein the changes are transferred over a peer-to-peer network.

16. The method of Claim 15 wherein the peer-to-peer network is a wireless network.

17. The method of Claim 15 wherein the peer-to-peer network is a wired network.

18. A method for synchronizing databases of multiple users in a peer-to-peer network wherein one of the users is designated an initiating user, the method comprising the steps of:

- a) extracting changes from a respective database of each of the users;
- b) sending the changes from each of the users to the initiating user;
- c) replicating the changes from each of the users onto the database of the initiating user;
- d) sending the changes on the database of the initiating user to each of the other users; and
- e) replicating the changes on a respective database of each user in order to synchronize the databases of all of the users.

19. The method of Claim 18 further comprising compressing the changes prior to sending them and decompressing the changes after being received.

20. The method of Claim 18 wherein:

- step (a) further comprises creating a transferred database from the changes to each respective database of the users;
- step (b) further comprises compressing and sending the transferred database as the changes to the initiating user; and
- step (c) further comprises decompressing the transferred database in order to replicate the changes to the database of the initiating user.

21. The method of Claim 18 wherein:

step (d) further comprises creating a transferred database from the changes to the database of the initiating user and then compressing and sending the transferred database as the changes to each of the databases of each of the users; and

step (e) further comprises decompressing the transferred database by each of the users in order to replicate the changes of all the users on each of the user's databases.

22. The method of Claim 18 wherein in step (d) the changes are transferred in parallel to each of the users.

23. A system for synchronizing databases of multiple users in a peer-to-peer network, the system comprising:

a plurality of computers in a peer-to-peer network, wherein one of the computers is designated an initiating computer, each computer having a database and software configured to:

a) extract changes from a source database of each computer of the users;

b) send changes from each of the user's computers in the peer-to-peer network to the initiating computer; and

c) replicate the changes from each of the databases of the user's computers onto the database of the initiating computer;

d) extract all of the changes from the database of the initiating computer;

e) send the changes to each of the user's computers in the peer-to-peer network; and

f) replicate the changes on a respective database of each of the users in order to synchronize all databases.

